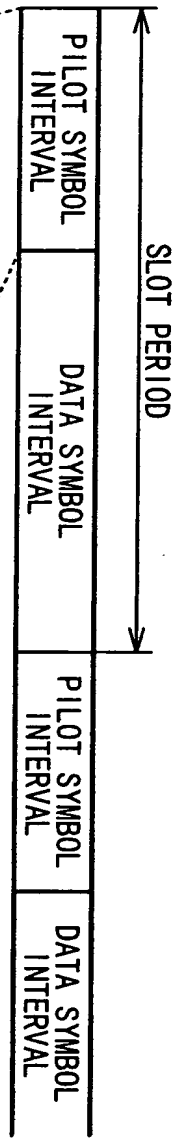


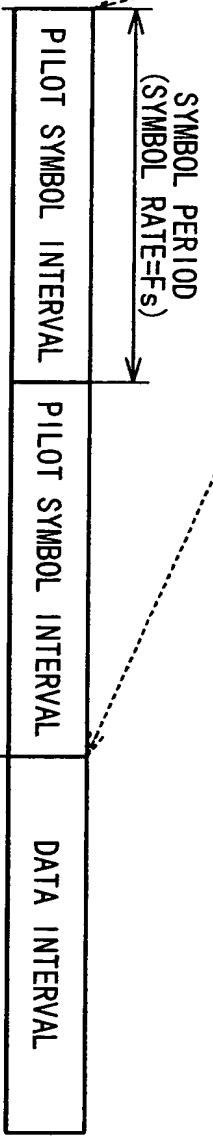
# Fig. 2A PRIOR ART

ESTIMATED  
FRAME FORMAT



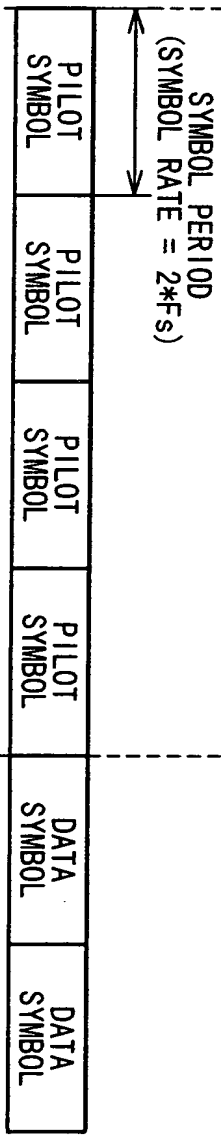
# Fig. 2B PRIOR ART

SYMBOL AFTER  
INVERSE SPREADING  
(SYMBOL RATE =  $F_s$ )



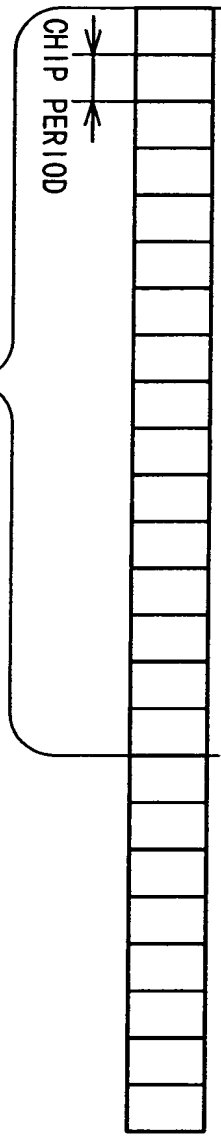
# Fig. 2C PRIOR ART

SYMBOL AFTER  
INVERSE SPREADING  
(SYMBOL RATE =  $2 \cdot F_s$ )

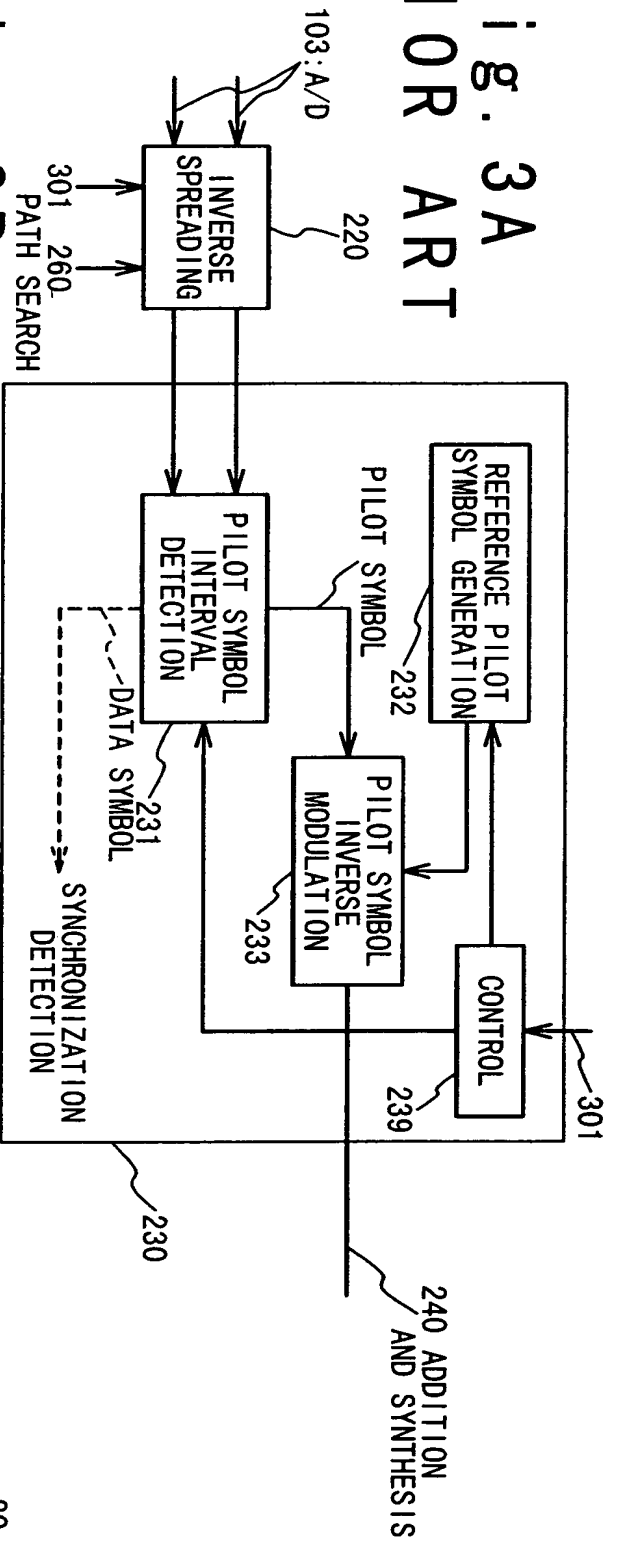


# Fig. 2D PRIOR ART

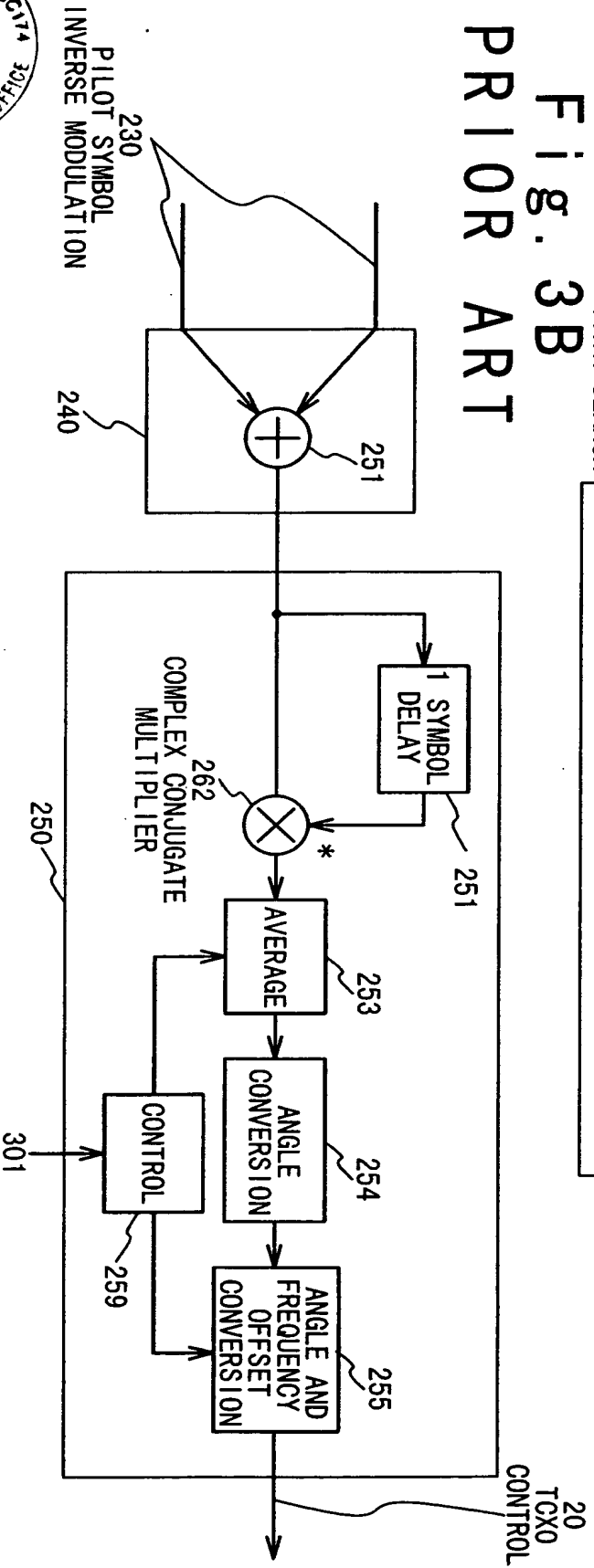
SPREAD SYMBOL



# Fig. 3A PRIOR ART



# Fig. 3B PRIOR ART

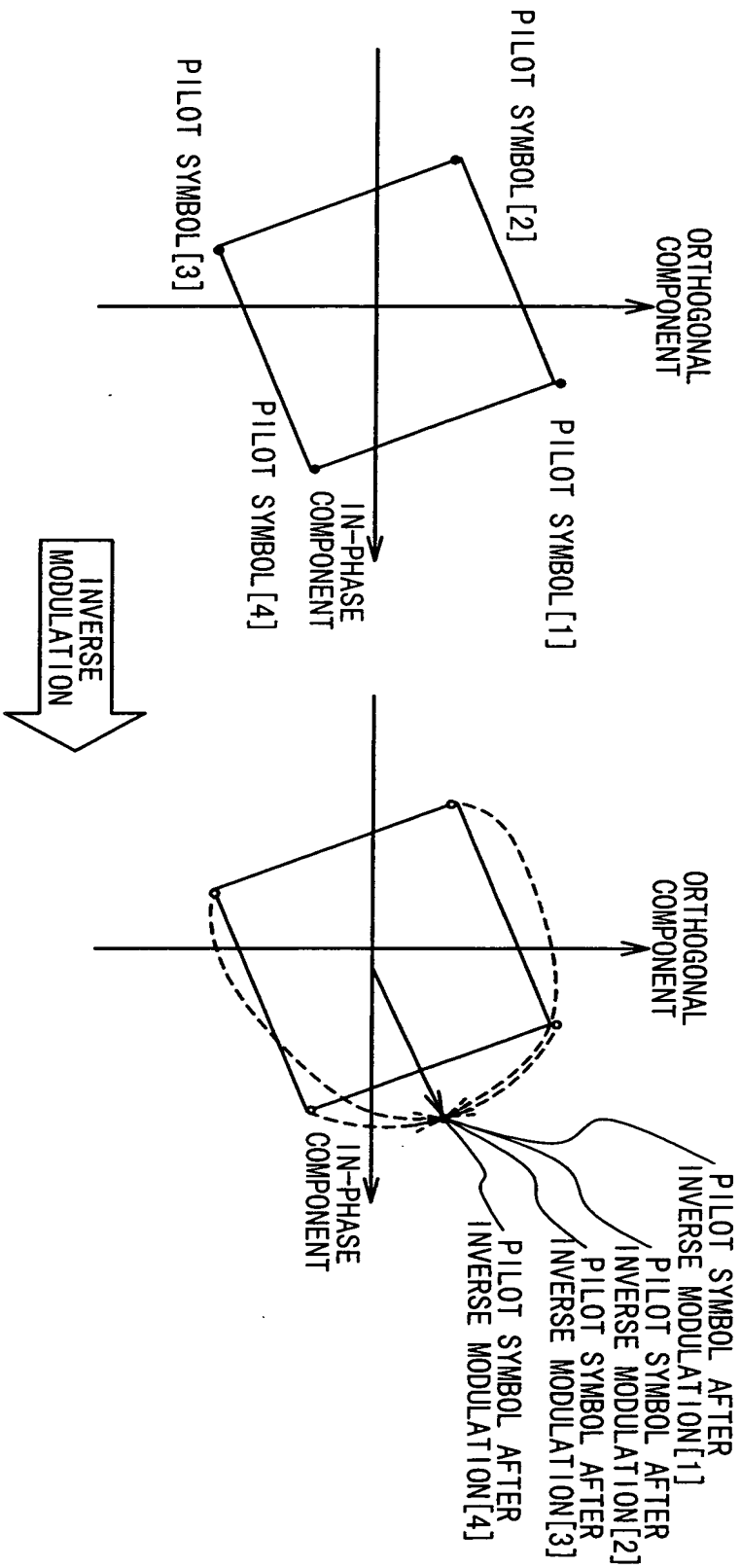


# Fig. 4A

# Fig. 4B

# PRIOR ART

# PRIOR ART



RECEIVED PILOT SYMBOL

INVERSE MODULATION



# Fig. 5

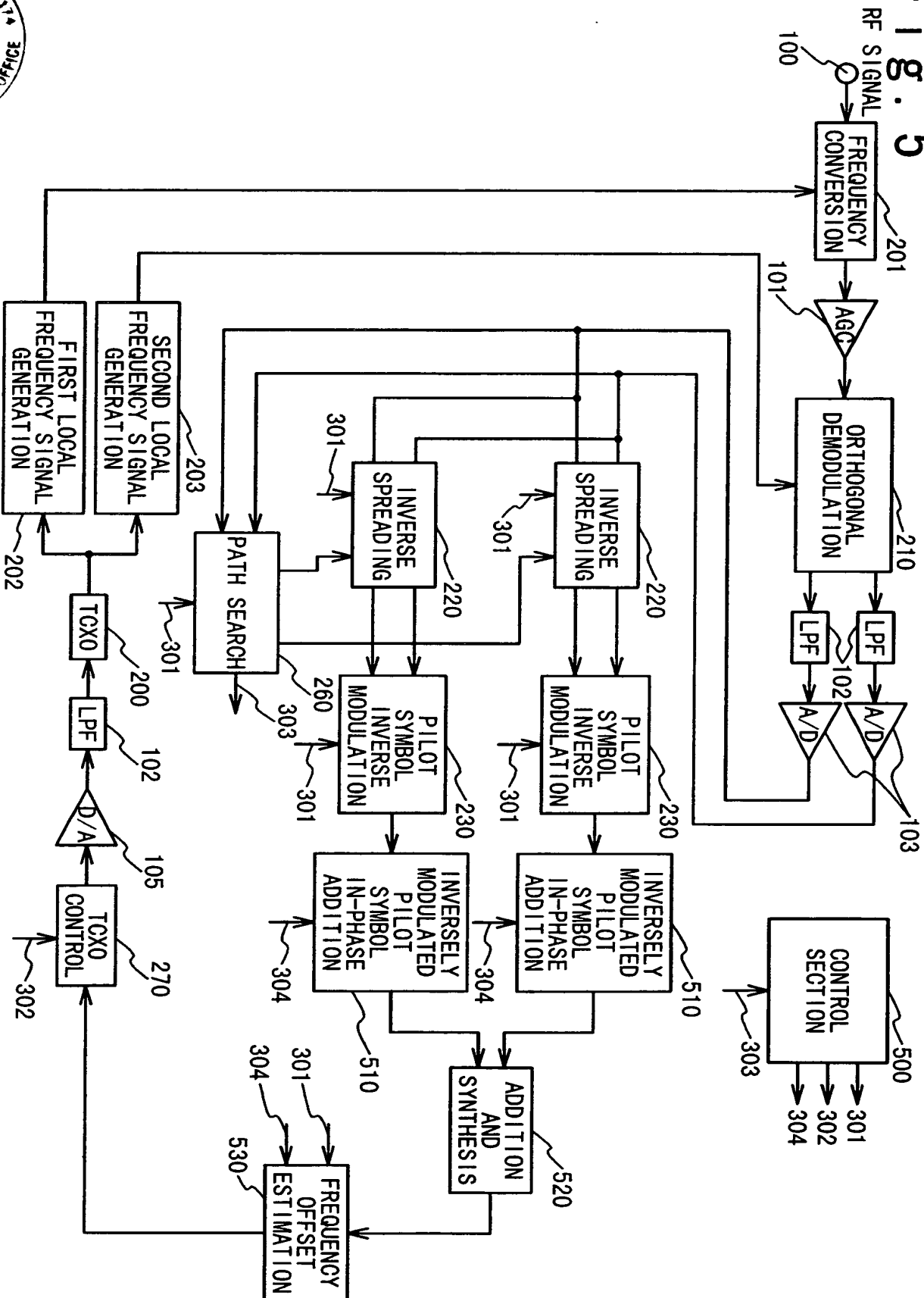


Fig. 6

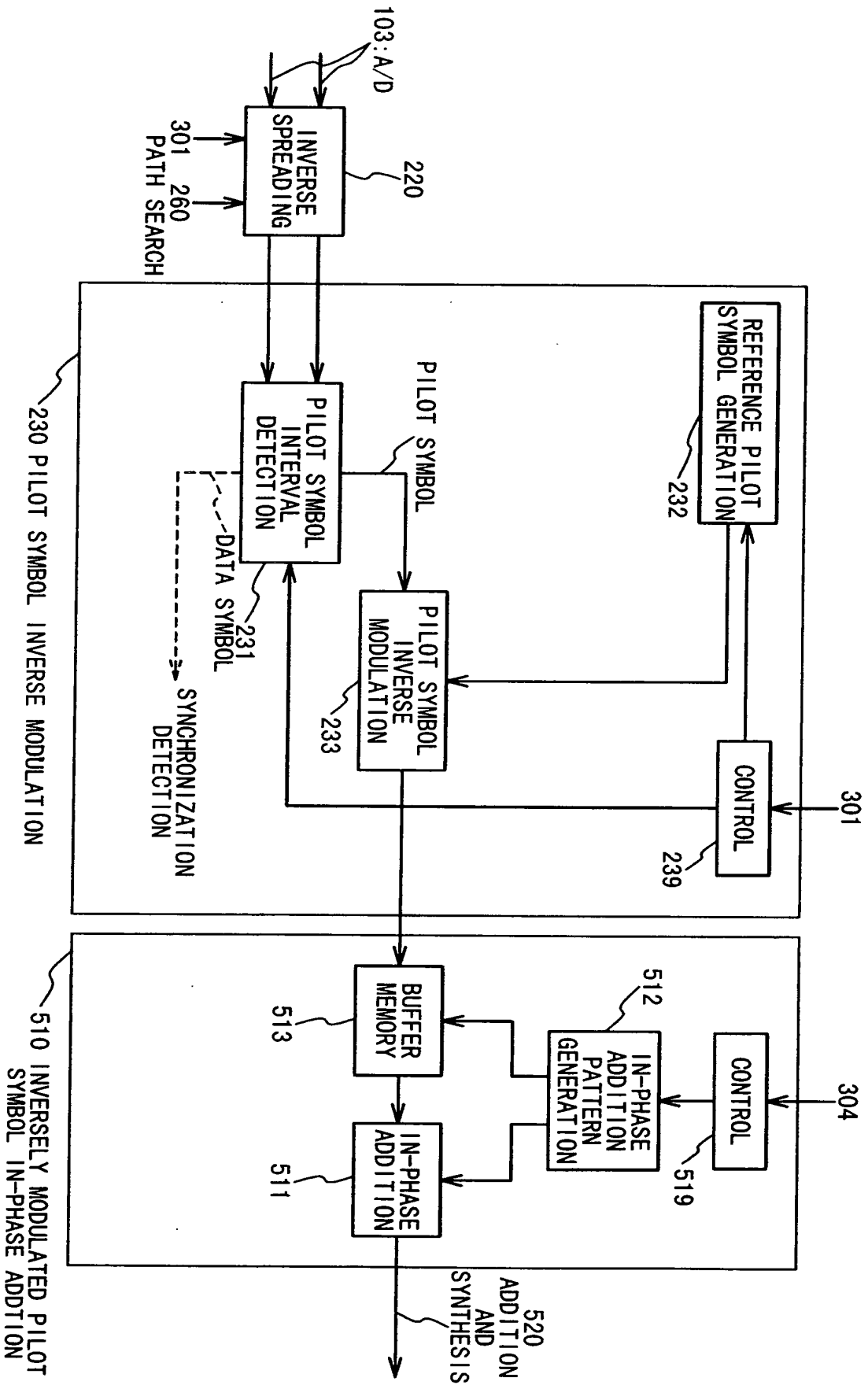
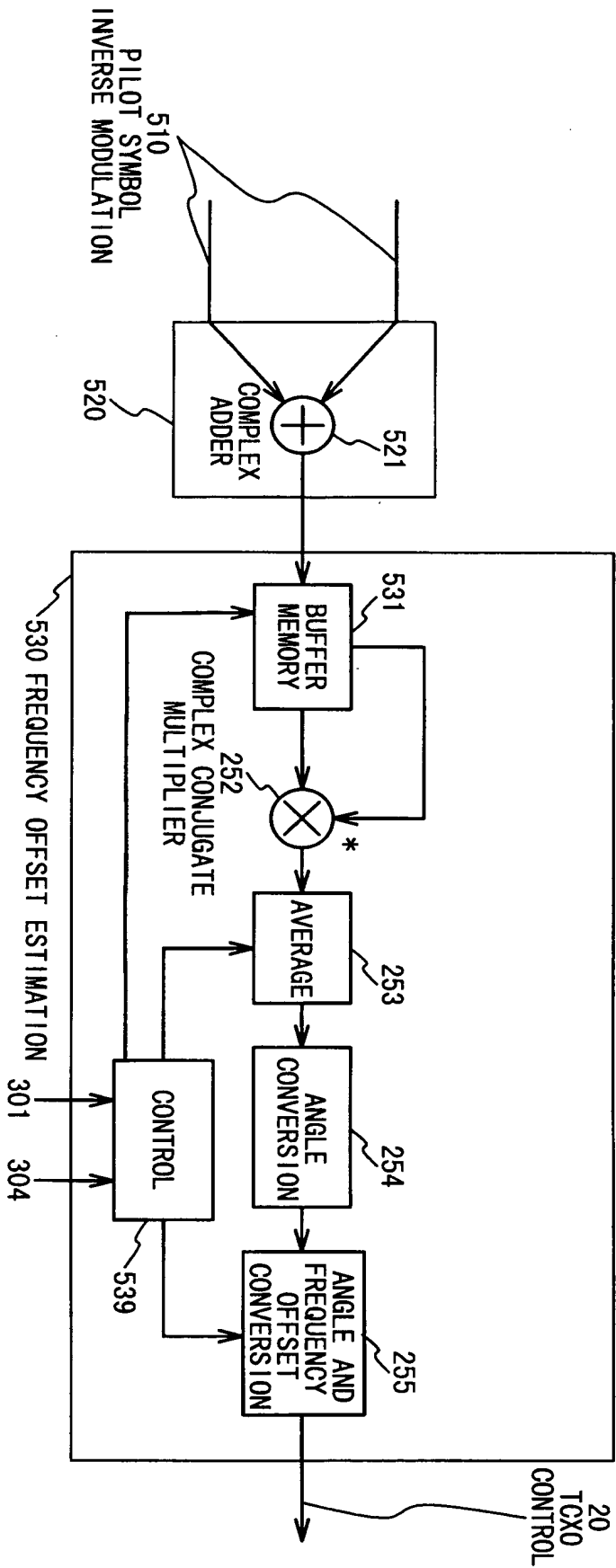
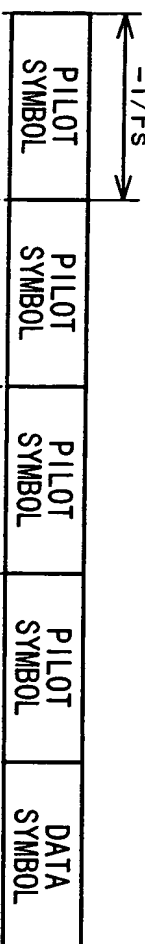


Fig. 7

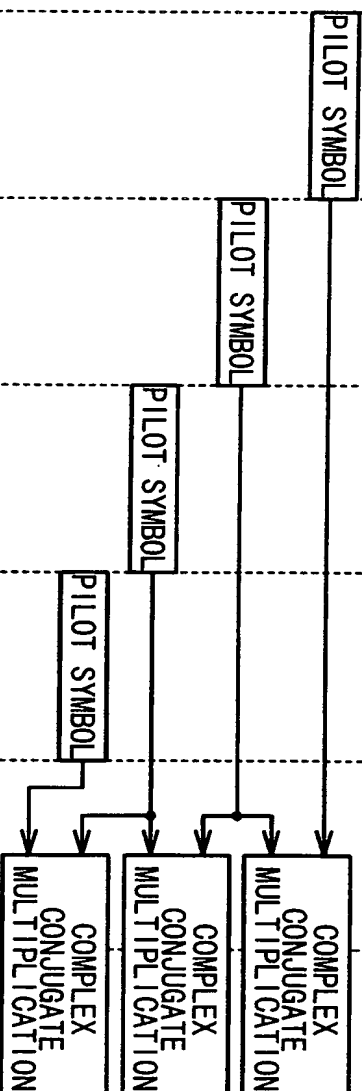


SYMBOL PERIOD  
=  $1/F_s$

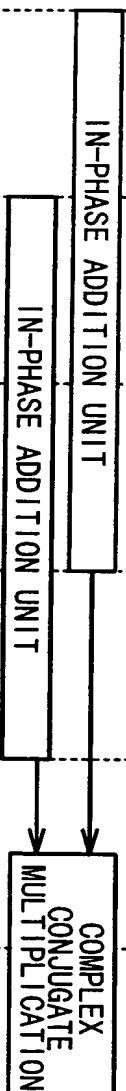
**Fig. 8A** (SYMBOL RATE =  $F_s$ )



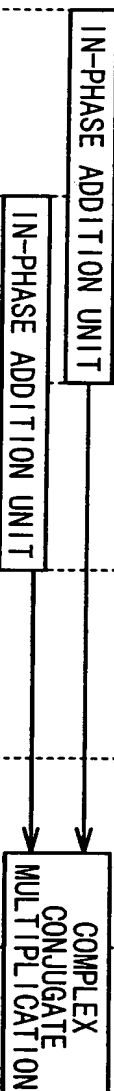
**Fig. 8B** IN-PHASE ADDITION RATE =  $F_s$  (CONVENT.)



**Fig. 8C** IN-PHASE ADDITION RATE =  $F_s/3$



**Fig. 8D** IN-PHASE ADDITION RATE =  $F_s/2$



**Fig. 8E** IN-PHASE ADDITION RATE =  $F_s/2$

